

ABSTRACT OF THE DISCLOSURE

An image forming apparatus includes an alignment pattern and an alignment pattern detector that detects the alignment pattern. The alignment pattern is formed in such a manner that a line image of a reference color and a line image of a color other than the reference color are superposed on each other with a predetermined shift amount. An acceptance width of the alignment pattern detector is determined so that the acceptance width satisfies a relation with a writing density of the image forming apparatus and a line width of the alignment pattern, as follows:

$$[\text{acceptance width}] > [\text{line width}] / (5.0627 \times [\text{writing density (dpi)}]^{-0.5331}).$$